



#3

## SEQUENCE LISTING

&lt;110&gt; BAYER AG

&lt;120&gt; DNA encoding the tobacco phytoene synthase

&lt;130&gt; Le A 34 326

&lt;140&gt;

&lt;141&gt;

&lt;160&gt; 10

&lt;170&gt; PatentIn Ver. 2.1

&lt;210&gt; 1

&lt;211&gt; 1728

&lt;212&gt; DNA

&lt;213&gt; Nicotiana tabacum

&lt;220&gt;

&lt;221&gt; CDS

&lt;222&gt; (244)..(1566)

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Trp Asn Gly Arg Ile Lys Lys Gly Gly Arg Gln Arg Trp Asn Phe Gly  
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435

440

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&lt;211&gt; 440

&lt;212&gt; PRT

&lt;213&gt; Nicotiana tabacum

&lt;400&gt; 2

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Ala Leu Ser Asp Thr Val Ser Arg Phe Pro Val Asp Ile Gln Pro Phe  
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 245 250 255  
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 275 280 285  
 Ala Thr Thr Glu Ser Val Tyr Asn Ala Ala Leu Ala Leu Gly Leu Ala  
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 Gly Arg Val Tyr Leu Pro Gln Asp Glu Leu Ala Gln Ala Gly Leu Ser  
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Val Val Ser Pro Cys Glu Val Ser Asn Gly Thr Gly Phe Leu Asp Ser  
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Val Cys Asn Glu Arg Asn Lys Arg Gly Val Lys Gln Arg Trp Asn Phe  
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Thr Met Thr Ser Glu Gln Met Val Tyr Asp Val Val Leu Lys Gln Ala  
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 Phe Thr Lys Arg Ala Tyr Val Ser Lys Pro Lys Lys Leu Ile Ser Leu  
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Pro Val Trp Ala Ser Leu Leu Leu Tyr Arg Gln Ile Leu Asp Glu Ile  
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Glu Ala Asn Asp Tyr Asn Asn Phe Thr Lys Arg Ala Tyr Val Ser Lys  
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Val Ile Arg Ala Asp Leu Asp Ser Met Val Ser Asp Met Ser Thr Asn  
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Arg Pro Phe Ile Gly Gly Lys Val Gly Ser Phe Val Asp Arg Arg Gly			
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Asn His Ile Glu Met Gly Leu His Val Phe Phe Gly Cys Tyr Asn Asn			
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Leu Phe Arg Leu Leu Lys Lys Val Gly Ala Glu Lys Asn Leu Leu Val			
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Gly Ala Leu Gln Gln Ile Arg Asp Leu Asp Ser Val Ser Phe Ser Glu			
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Trp Phe Met Ser Lys Gly Gly Thr Arg Ala Ser Ile Gln Arg Met Trp			
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Asp Pro Val Ala Tyr Ala Leu Gly Phe Ile Asp Cys Asp Asn Ile Ser			
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Ala Arg Cys Met Leu Thr Ile Phe Ala Leu Phe Ala Thr Lys Thr Glu	
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Ala Ser Leu Leu Arg Met Leu Lys Gly Ser Pro Asp Val Tyr Leu Ser	
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Gly Pro Ile Lys Lys Tyr Ile Leu Asp Lys Gly Gly Arg Phe His Met	
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Met Tyr Val Ser Gly Leu Ala Met Ser Lys Ala Thr Gln Lys Lys Val	
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Val Lys Ala Asp Ala Tyr Val Ala Ala Cys Asp Val Pro Gly Ile Lys	
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Arg Leu Val Pro Gln Lys Trp Arg Glu Leu Glu Phe Phe Asp Asn Ile	
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Tyr Lys Leu Val Gly Val Pro Val Val Thr Val Gln Leu Arg Tyr Asn	
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Arg Ala Thr Gly Leu Asp Asn Leu Leu Tyr Thr Pro Asp Ala Asp Phe	
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Ser Cys Phe Ala Asp Leu Ala Leu Ala Ser Pro Glu Asp Tyr Tyr Ile	
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Val	Leu	Ala	Leu	Phe	Pro	Ser	Ser	Gln	Gly	Leu	Glu	Val	Thr	Trp	Ser		
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Ser	Val	Val	Lys	Ile	Gly	Gln	Ser	Leu	Tyr	Arg	Glu	Gly	Pro	Gly	Lys		
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